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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/729,112		12/05/2003	Dapeng Wang	2269-3579.2US (98-0062.02	3169
24247	7590	05/23/2005	· E		XAMINER
TRASK B	-		ROSE, ROBERT A		
P.O. BOX 2550 SALT LAKE CITY, UT 84110				ART UNIT	PAPER NUMBER
	,			3723	
				DATE MAILED: 05/23/2005	5

Please find below and/or attached an Office communication concerning this application or proceeding.

				WW			
		Application No.	Applicant(s)				
		10/729,112	WANG, DAPENG				
	Office Action Summary	Examiner	Art Unit				
		Robert Rose	3723				
Period fe	The MAILING DATE of this communication or Reply	ation appears on the cover sheet	with the correspondence addre	ess			
THE - Exte after - If th - If NO - Failt Any	MORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNICA ensions of time may be available under the provisions of 3 r SIX (6) MONTHS from the mailing date of this communi e period for reply specified above is less than thirty (30) to period for reply is specified above, the maximum statuture to reply within the set or extended period for reply will reply received by the Office later than three months after ned patent term adjustment. See 37 CFR 1.704(b).	ATION. 37 CFR 1.136(a). In no event, however, may a cation. 1ays, a reply within the statutory minimum of the ory period will apply and will expire SIX (6) MOI, by statute, cause the application to become	a reply be timely filed nirty (30) days will be considered timely. DNTHS from the mailing date of this commandation of the c	nunication.			
Status							
1)⊠	Responsive to communication(s) filed of	on 07 May 2005		•			
)⊠ This action is non-final.					
3)	<i>,</i>		itters prosecution as to the m	perite ie			
٠,٠	since this application is in condition for allowance except for formal matters, prosecution as to the merits is losed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims	•					
·		dication					
7/63	✓ Claim(s) <u>1-32</u> is/are pending in the application.4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠	Claim(s) <u>27-32</u> is/are allowed.	withdrawn from consideration.					
· —	i)⊠ Claim(s) <u>27-52</u> is/are allowed. i)⊠ Claim(s) <u>1-6,9,14-18,21 and 26</u> is/are rejected.						
	Claim(s) <u>7,8,10-13,19,20 and 22-25</u> is/	-					
	Claim(s) are subject to restrictio	•					
Applicat	ion Papers						
	·	Evaminer					
	☐ The specification is objected to by the Examiner. ☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
.0,	Applicant may not request that any objection						
	Replacement drawing sheet(s) including the			1 121(d)			
11)	The oath or declaration is objected to by			- •			
	under 35 U.S.C. § 119						
_	Acknowledgment is made of a claim for	foreign priority under 25 LLS C	£ 110(a) (d) ar (f)				
	☐ All b)☐ Some * c)☐ None of:	toreign phonty under 35 U.S.C.	9 119(a)-(d) or (f).				
	1. Certified copies of the priority do	cuments have been received.					
	2. Certified copies of the priority do	cuments have been received in	Application No				
	 Copies of the certified copies of the application from the International 		n received in this National Sta	age			
* 5	See the attached detailed Office action for	• • • • • • • • • • • • • • • • • • • •	ot received.				
Attachmen	nt(s)						
1) Notic	ce of References Cited (PTO-892)	4) Interview	Summary (PTO-413)				
2) 🔲 Notic 3) 🔯 Infor	ce of Draftsperson's Patent Drawing Review (PTO mation Disclosure Statement(s) (PTO-1449 or PTO	Paper No O/SB/08) 5) Notice of	o(s)/Mail Date Informal Patent Application (PTO-15	52)			
Pape	er No(s)/Mail Date	6) Other: _		1			

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DETAILED ACTION

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- Receipt is acknowledged of Applicant's Prior Art Statement, filed December 5,
 All of the references therein have been considered and made of record.
- 2. Claims 26-32 have been added.
- 3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-3, 6, 9, 14-15, 18, and 21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Breivogel et al. Breivogel et al disclose a cmp apparatus and method of polishing, comprising all of the subject matter set forth in Applicant's claims above. Note polishing pad(23); deformable pad(22)(20) having isolated solid supports(22); and ventral layer(20).
- 5. Claims 1, 3-6, 9, 14-18, 21, and 26 are rejected under 35 U.S.C. 102(a) as being anticipated by Eppert Jr. et al. Note figures 1-2 of Eppert Jr. et al which show a deformable layer comprised of a plurality of solid supports and an integral dorsal or ventral layer, corresponding to that shown in the embodiments of Applicant's figures 8 and 10. Note the use of a cushioning pad between the solid supports and the lower surface of the polishing pad.
- 6. Claims 1-2, 9, 14, and 21 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Tolles et al(US 6217426). Tolles et al discloses a CMP apparatus and

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method of polishing comprising all of the subject matter set forth in applicant's claims above.

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- 7. Claims 7-8, 10-13, 19-20, and 22-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 8. Claims 27-32 are allowed.
- 9. Applicant's arguments filed March 7, 2005 have been fully considered but they are not persuasive. Applicant has argued that the solid supports in Breivogel et al are not deformable, but are disclosed as rigid. However, the degree of deformability is not specified in the claim, and even supports comprised of an epoxy composition are subject to some degree of deformation. Moreover, the newly cited art to Eppert, Jr. et al clearly shows a deformable pad(3) made up of solid supports, with integral ventral(fig.1), or dorsal(fig.2) layers, which are described as "semi-rigid", and which are located between the polishing pad and platen. Newly cited art to Tolles et al also discloses deformable protrusions(60), which form a layer of solid supports which underlie the polishing pad(44).
- 10. In view of the new grounds of rejection not necessitated by applicant's response, this action is not made final.
- 11. Any inquiry concerning this communication should be directed to Robert Rose at telephone number (571) 272-4494.

Rr

May 18, 2005

Robert Rose Primary Examiner Art Unit 3723

Politon